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47-5-350

Date New 23, 1947	File Safety Waste Disposa
Subject	Those rligible To kead The Attached
By Z. J. Maryby	Серу #
To Lt. Col. W. P. Labor	Copy #file
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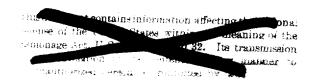
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Date AUG 25 1971

May 21, 1947



U.S. Atomic Energy Commission P.O. Box E

Oak Ridge, Tempesees

Attention: Lt. Col. V. P. Labor

Subject: Disposal of Weste X Metal

Gentlemen:

Reference is made to your letter of April 22, 1947, regarding the disposal of waste X metal.

In regard to Paragraph 2 of your letter, 15 pounds of the unirrediated dissolved metal was forwarded to your office May 9, 1947. It is believed that the material supplied is representative of the aggregate.

This untertal contained in approximately 200 wooden barrels which are rapidly decaying is now stored in the vicinity of the Settling Besin. A survey made by a member of the Health Physics Department should that the ground near the barrels was becoming contaminated. The barrels average 3 wrep/hr at 4" and the timbers on which the barrels rest, in one case, gave 2 wrep/hr at 4", and 30,000 d/m — with Zeuto. The general A, T background near the barrels is high (—1 wrep/hr), indicating a spreading of contamination to the ground. The inside surface of one broken barrel showed 45,000 d/m — We again recommend that this health hazard be climinated as soon as possible by the most practical method; namely, burial in the area designated for this purpose.

Calculations have been made in an affort to make an estimate of the plutonium content of the exposed slugs new stored in the want (Item 2 of my letter to you of October 29, 1946).

Jed Davi 12/28/94



Calculations based upon the following assumptions indicate approach a set of plutonium per sing:

- a. The metal was at the bottom of the experimental arrangement.
- b. The pile was operated at 2000 KW.
- s. The netal was exposed for a total of 300 days.

It is estimated that the accuracy of this delouistion is within a factor of two and is more probably high than Day.

A program conducted on a partitime basis is now under way for removing the case from the reject slugs. This will be completed within the next few days.

In view of the fact that the encount of elactified anterial on the Plant Site is rapidly instanting and the limited adequate storage facilities evallable, we again would like to explants the mesensity for disposing of the waste X metal as outlined in my letter to you of October 29, 1946.

pounds of wate metal. Due to the recent slug failures in the pile active oxide has been deposited in the canal. It is essential that the canal be theroughly element before the next physical inventory of the X metal can be taken. It is practically impossible to clean the canal well with the congested conditions that new exist. Therefore, we strongly recomment that this material be placed in steel because and buried in a marked grave where it can, at some later date, be recovered if necessary.

Very truly yours,

SJM/ob

Edgar J. Murphy
Assistent Research Director

Matribution:

- 1 2 4. 9. leber
 - 3 L. B. Emlet
- 4 5 8. J. Murchy
 - 5 Reading File
 - 7 Central Files